

What is claimed is:

1. A liquid crystal display apparatus comprising:  
a liquid crystal panel having a pair of substrates facing to each other; and  
liquid crystal material sealed between said pair of substrates, wherein  
5 said pair of substrates being sealed not only at a first seal portion located  
at peripheral portion of said substrates but also sealed at dot-shaped and/or  
linear-shaped second seal portion located outside of an effective picture element  
area.

10 2. The liquid crystal display apparatus as cited in Claim 1, wherein  
said liquid crystal panel is a micro-lens type liquid crystal display panel  
having a TFT substrate, a micro-lens equipped facing substrate and on-chip  
spacers there-between.

15 3. The liquid crystal display apparatus as cited in Claim 1, wherein  
said second seal portion includes said dot-shaped seal portions at  
neighbor of corners of said effective picture element area and an injection gate  
for liquid crystal material and further includes said linear-shaped seal part  
located opposite to said injection gate for liquid crystal material and extending  
20 along an edge of the effective picture element area.

4. A manufacturing method of a liquid crystal display apparatus having a  
liquid crystal display panel, comprising the steps of:

25 superposing a pair of facing substrates to form said liquid crystal display  
panel; and

injecting liquid crystal display material between said pair of facing  
substrates, wherein

a first seal material is coated on periphery of said pair substrates, and  
a second seal material is coated in dot-shaped and/or linear-shaped form  
30 at portions located at outside of an effective picture element area of said liquid  
crystal display panel.

5. The manufacturing method of a liquid crystal display apparatus as cited in Claim 4, wherein

said pair substrates are a TFT substrate and a micro-lens equipped facing substrate, and

5 said pair of substrates are superposed and sealed after forming on-chip spacers there-between.

6. The manufacturing method of a liquid crystal display apparatus as cited in Claim 4 or Claim 5, wherein

10 said second seal material is not only coated in dot-shaped form at neighbor of corners of said effective picture element area and an injection gate for liquid crystal material but also coated in linear-shaped form and extended along an edge of the effective picture element area at a portion located opposite to said injection gate for liquid crystal material.

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